

Nominee: NHS Airedale Bradford and Leeds

Supporting Vendor: Schneider Electric/ APT

Nomination title: NHS Airedale, Bradford and Leeds high density data centre

Schneider Electric Elite Partner, APT, has provided a new high density data centre to provision IT services for NHS Airedale, Bradford and Leeds. Over 500,000 people in the area currently use healthcare services provided by the PCT. The local population already includes a higher than UK average number of young people, and is expected to climb to 650,000 in the coming decades. The PCT is responsible for all the health services delivered in the local community by GPs, dentists, pharmacists, opticians, voluntary organisations and local and specialist hospitals. Although the Trust is in the midst of a server virtualisation programme which could potentially free up IT space, a new data centre was required to replace an existing facility which was not considered to provide a suitable environment for the new IT server load. The new data centre provides a number of IT services to 129 of PCT sites, including 84 GP surgeries as well as dental health, podiatrists and palliative care providers. Services supported include Sharepoint collaboration tools, various websites, e-mail including webmail, Blackberry services and telemedicine.

The new facility provides a stable and reliable data centre is critical to power and cool the high density servers selected for the existing services moving forward, as well as for forthcoming requirements including a major, 4500-seat desktop virtualisation project. The use of Schneider Electric's InRow OA over-aisle cooling units, together with a hot aisle containment solution (HACS), enables greater utilisation of floor space for IT equipment racks with reliable and efficient cooling. The data centre is the first to utilise Schneider Electric's APC InRow OA overhead cooling units. The units are a key component in deploying a modern, high density data centre with a contained hot aisle. The data centre has been installed in a listed building which was neither designed to accommodate technology, nor had a large volume of contiguous space in which a purpose built room could be constructed. A major benefit of the over-aisle cooling design is that the floorspace constraint is mitigated because the overhead cooling units take up absolutely no room which could otherwise be used for IT equipment. In addition, there were two important limitations affecting the build; firstly the data centre was to be housed in a listed building (i.e., a building which has been placed on the Statutory List of Buildings of Special Architectural or Historic Interest). Therefore the Trust wanted to avoid the complications of special planning requirements needed for alterations to such structures, such the installation of a raised floor environment. The second limitation concerns the ownership of the building which is leased and not owned by the Trust. With pressures on budgets and cost-cutting as well as the uncertainty which surrounds future NHS funding, the Trust wanted to be sure that any data centre infrastructure equipment in which it invested would be portable and re-usable at another site should circumstances change and a move to a new location be required. The installation of the data centre, using APC InfraStruxure was able to meet the above criteria, with minimal structural or cosmetic alterations required to be made to the host building.

Why nominee should win

- Building Constraints: the solution was designed to require minimal structural alterations, avoid planning regulations and be removable to a new site.

- Capacity Optimisation: provides almost twice the room for servers than the facility it replaces did, in the same amount of floor space.
- Innovation: Facility utilises overhead cooling to maximise IT accommodation space
- Scalability: Cooling and power protection are scalable and the room could accommodate a further two equipment cabinets if required.
- Risk Mitigation: Solution comprises of modular, standardised components, reducing installation time as well as human error during maintenance and MTTR, improving availability